STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



GOVERNOR

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DAVID PILITTELL COMMISSIONER

September 15, 2008

SEP 1 7 2008

Ms. Kristi Eiane Town of Harpswell PO Box 39 Harpswell, ME 04079 Town of Harpswell

RE: Supply well at Mitchell Field

Dear Ms. Eiane:

The Maine Department of Environmental Protection (MEDEP) previously imposed a pumping rate restriction on the supply well in the former Defense Fuel Farm (Mitchell Field) of 450 gallons per day (GPD). This pumping rate restriction was recorded in the quitclaim deed when the Navy transferred the property to the Town of Harpswell in October 2001. This pumping rate was based, in part, on the Town's desire to utilize the site for recreational purposes only.

In November 2006, with a grant from the Brownfield fund, the MEDEP contracted with Woodard and Curran (W&C) to develop a numerical groundwater model (MODFLOW) to evaluate potential impacts of overburden groundwater contamination to the bedrock aquifer. The modeling results demonstrated that:

- no contamination would be predicted to be drawn into the supply well at a pumping rate of 6.25 gallons per minute (GPM) and
- contamination could be drawn into the supply well at a rate of 12.5 GPM.

In May 2007 W&C, on behalf of the MEDEP, supervised the installation of two bedrock monitoring wells to determine whether bedrock groundwater contamination exists in the southern portion of the former above ground storage tank farm. Details of the test can be found in an Internal Memorandum to Jean Firth from Hank Andolsek, dated July 10, 2007. Analytical tests for diesel range organics (DRO) revealed that no contamination was detected in these wells. In addition, soil samples that were collected during the well installation also showed no DRO contamination.

Based on the modeling results and the well sampling analysis mentioned above, the MEDEP will no longer impose a strict pumping limit of 450 GPD on the supply well at the former Defense Fuel Farm. The Town of Harpswell, at its own discretion, may consider increasing the pumping rate up to 6.25 GPM as reflected by the model. The Town must be aware that groundwater modeling is only a predictive method to understand potential impact which may occur at higher pumping rates. The 6.25 GPM

rate predicted by the model may or may not reflect actual conditions at the site. Consequently, the following conditions must be met if the Town of Harpswell intends to use the well at a pumping rate up to 6.25 GPM.

- The MEDEP will require two years of quarterly monitoring for gasoline range organics (GRO) and DRO to be conducted on the supply well due to the presence of nearby petroleum contamination. Following this period, sampling schedules will be reconsidered.
- No other locations for groundwater extraction will be permitted on the property without a full hydrologic study demonstrating that clean water can be removed from the aquifer without affecting the distribution of existing contamination. A prior approval from the MEDEP will also be required.
- The Town needs to work directly with DHHS to secure the appropriate permit for the supply well.
- The Town will prepare a contingency plan to address the potential for low level fuel contamination in the supply well. If the well should become contaminated, the Town will be responsible for mitigating the risk associated with site-related contamination (e.g., through filtration).

If the Town of Harpswell wishes to pump at a higher rate, exceeding the 6.25 GPM, the Town will be required to secure the services of a hydrogeologic consulting firm to assess the appropriateness of GZA's recommended and DHHS's approved rate of 12 GPM.

Attached please find copies of the W&C model results and the July 10, 2007 memo to Jean Firth from Hank Andolsek. In the spirit of cooperation between the town of Harpswell and the MEDEP, we encourage you to comply with the requirements outlined above.

If you have any questions related to this letter feel free to contact me at (207) 287-7709.

Sincerely,

Naji Akladiss, P.E.

Remedial Project Manager

Division of Remediation

Bureau of Remediation & Waste Management

cc:

Ted Wolfe, MEDEP

Gail Lipfert, MEDEP

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